even with "extensive public measures," no such revolutionary change can be effected in the next fifty years. It will be interesting to see which judgment will be the correct one. We ought not to let our wishes interfere with our judgment in such an important matter.

The fact that there is a considerable netreproductivity differential in occupational groups is significant in view of the fact that virtually all the studies here surveyed showed "marked differences between occupational groups in their cultural-intellectual development as measured by intelligence tests. These studies often show a difference of twenty or twenty-five points in average intelligence quotient between the uppermost and the lowest of five main occupational groups. Classification by income, or by other indices of social status, usually yields somewhat similar results." The authors continue:

There is much overlapping of individual abilities among all social classes. Nevertheless, the relatively high frequency of persons of unusual ability in the upper social groups and the relatively high proportion of mental defectives or persons with very inferior intellectual development in the lowest social groups is one of the striking results indicated in the survey.

While the authors found no large or important differentials by race, region, or country of origin, "mothers with husbands in the unskilled labouring group were having over 15 per cent. more children than would suffice for family replacement, whereas mothers with husbands in the professional group were having only about 75 per cent. of the number needed for family replacement." Manual workers are increasing at a time when, owing to increasing mechanization, the demand for this is decreasing. This leads, in the words of Professor T. N. Carver (whose theories might well have been more widely drawn on), to occupational congestion, with all its implications for poverty and low standards.

Lorimer and Osborn conclude that controlled studies indicate that "from one-third to one-half of the variations usually found among occupational classes in average levels of cultural-intellectual development are due to deviations in hereditary capacities." And hey add:

In general, it is evident that those who enjoy the greatest cultural resources are not having enough children to replace themselves in the next generation, and that the most undeveloped groups in our national life are the chief sources of population increase. . . . Thus, each new generation of Americans is tending to be disproportionately recruited from areas with low standards of living and inferior educational resources. . . .

Thus many of the present varying rates of reproduction of American groups are bad from the economic, the cultural, or the eugenic point of view. There is, however, an encouraging indication that present differences in reproduction rates are in part the expression of an incomplete social process.

Biological forces are running counter to our conscious educational efforts. "And yet," they rightly add, "this whole set of forces, perhaps second in social importance only to the need for a more stable and equitable economic order, has remained largely neglected by social scientists."

Many will agree also with the statement that "Population trends have run their course in the past with little attention by anyone to their momentous influence on human destiny. . . . Eventually, if our dream of human progress is to be realized, rational social action must replace the operation of blind forces in this as in other fields."

There are nearly forty pages of bibliography.

NORMAN E. HIMES.

STERILITY

Meaker, S. R., M.D. Human Sterility. London, 1934. Baillière, Tindall & Cox. Pp. 276. Price 18s.

DR. S. R. MEAKER is a physician whose interests are not confined to his work as a gynæcological consultant. For many years he has shown an interest in sociology, and more particularly in those aspects of that subject that are connected with his profession. As chairman of a special sub-committee formed to study sterility, he has been in a particularly advantageous position to acquire facts bearing on this problem. Moreover, he has also taken the initiative in opening special clinics for childless couples, at which both the husband and the wife are examined with a

degree of thoroughness that is rarely found elsewhere. No man is, therefore, in a better position to write on the subject of human sterility.

As a clinician he has approached his subject from a practical point of view, and has in turn dealt with the causation, the diagnosis and the treatment of infertility in both sexes. Since satisfactory treatment can only be based on a correct diagnosis of the pathology of sterility, a great deal of space has been given to the tabulation of the causes of childlessness. Dr. Meaker lays particular emphasis on the frequency with which an endocrine disorder is discovered in such cases. Every clinician who has had to investigate the fertility of males must have been struck by the comparatively common discovery that the semen of an apparently healthy male contains no spermatozoa. When there exists no mechanical obstruction in the genital tract, azoospermia is due to aspermatogenesis. The commonest explanation of this failure of an apparently healthy testis to form spermatozoa is some form of pituitary dysfunction. The investigation of the pituitary, therefore, takes a very important place in the examination of an infertile patient. It is unfortunate that biochemical methods are of such little assistance in the diagnosis of pituitary disorders, and still more unfortunate that so little progress has been made in the therapy of the pituitary Some readers will feel that Dr. Meaker overrates the value of pituitary preparations when taken by the mouth. The majority of those who have tried different forms of extract have found them of little value as stimulators of spermatogenic activity, although the author claims many cases in which fertility, both in the male and in the female, has been materially increased thereby. But, as is stated in the foreword, the endocrinological material contained in the book represents one school of thought in a new and rapidly developing field where there is room for some differences of interpretation. The fact that the experience of some other workers has not been so happy as that of Dr. Meaker in no way detracts from the value of his book.

From the point of view of the eugenist, there is little in this book that has a direct bearing on his subject. The eugenist is not disturbed by the total incidence of sterility in the race, but rather by the inadequate reproduction of superior families. factors that produce sterility are found with almost equal frequency amongst the better and the less satisfactory members of the race, so that they exert but little influence on race degeneration or improvement. Nevertheless, since a deficient diet, a poor level of general health and a high incidence of venereal disease are important causes of infertility, the excellent survey of the subject provided by the writer cannot fail to be of some interest to the student of eugenics.

KENNETH WALKER.

FREUDIAN PSYCHOLOGY

Stephen, Karin, M.A., M.R.C.S., L.R.C.P. Psycho-analysis and Medicine: The Wish to Fall Ill. Cambridge, 1933. The University Press. Pp. 238. Price 8s. 6d.

DR. ERNEST JONES, in his preface, leads us to expect a very good book, and this book certainly deserves his praise. Dr. Karin Stephen applies the term "psycho-analysis" to the findings and technique of the Freudian school—a restriction of its use which saves confusion, and is in accordance with the report made by the British Medical Association on the subject in 1929. Her aim, in which she has admirably succeeded, is to give a brief survey of psycho-analysis to doctors or other people intelligently interested in the subject.

As is natural in a young and growing science, there are—as Dr. Stephen makes evident—divergences of opinion about new work that is being done; but the greater part of her book is devoted to the body of knowledge accepted by all psycho-analysts. The first chapter deals with the fact of psychogenic illness and the necessity for a psychological approach to it. The author considers that psycho-analysis gives a working hypothesis for such an approach and that